

Epilepsy and Other Health Conditions

Definition: According to the Epilepsy Association of America, epilepsy is a neurological disorder which briefly interrupts the usual function of the brain. The disruption produces seizures -- a change in consciousness, involuntary movements, staring episodes, and sometimes convulsions. They are usually over in a few seconds or a few minutes.

Incidence: About 2 million Americans have epilepsy; of the 125,000 new cases that develop each year, up to 50% are in children and adolescents.

Other health impairments have been defined by law to include chronic or acute health problems such as heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, cancer lead poisoning, leukemia, or diabetes which adversely affects a child's educational performance.

Students with a health impairment may have limited strength, vitality, or alertness due to their health condition.

•Activities

1.) Elementary School Age

- a.) "Kids on the Block" Puppet Presentation About Epilepsy
- b.) Poster Display

2.) Middle School Age

- a.) Seizure First Aid

3.) High School Age

- a.) Story Writing

•Fact Sheet on Epilepsy

•Epilepsy Fact or Fiction

•Epilepsy Quiz

•Bibliography of Children's Literature & Audio Visual Materials

•Community Resource Numbers

ELEMENTARY SCHOOL

"Kids on the Block" Puppet Presentation About Epilepsy

Purpose: To educate students about the condition of epilepsy; how it is detected, myths and misconceptions, and what to do if a friend has a seizure.

Materials: None

Activity:

Invite the KIDS ON THE BLOCK program on Epilepsy to your school by contacting Epilepsy Foundation of the Chesapeake Region at 410-828-7700

ELEMENTARY SCHOOL

Poster Display

Purpose: To encourage students to learn more about disabling conditions that have affected a classmate or someone they know.

Materials: Toll Free Numbers listing from the General Overview section of this guide, 8-1/2" by 11" poster board sheets, art supplies: markers, paints, brushes, pencils, crayons

Activity:

Children will contact organizations for information about a disability that they would like to learn more about. Provide students with the listing of toll free numbers to select a topic. Students will need to contact the organization of their choice and request pamphlets and/or other information they will need to create a poster that includes the following details:

- Disability
- Cause
- Characteristics
- Prevention

Students will share their posters with the class and they will be displayed around the classroom for reference.

MIDDLE SCHOOL

Seizure First Aid

Purpose: To educate students about epilepsy and first aid for seizures.

Materials: None

Activity:

Contact the Epilepsy Foundation of the Chesapeake Region to provide a classroom presentation on epilepsy, which includes an informative video about the different types of seizures. Prior to the presentation, have each student submit a question or concern they have related to epilepsy. Complete the true/false questionnaire and test on epilepsy, and have the presenter from The Epilepsy Foundation of the Chesapeake Region review this information with students and provide the correct answers.

HIGH SCHOOL

Story Writing

Purpose: To incorporate information about a disability or health impairment into a creative writing exercise.

Materials: List of Toll Free Numbers from the General Overview section of this guide, and resource numbers from this section of the guide.

Activity:

Provide students with the listing of toll free numbers on various disabilities.

Have students obtain information about a disability that has affected them in some way, either directly, or through someone they know.

Have students write a short story about a person with the disability they selected. The story should include details about how the person's disability affected their family, school, or social life. Grade the stories based on how well the writer applied the information they learned to the fictional person's life.



EPILEPSY

◆ Definition ◆

According to the Epilepsy Foundation of America, epilepsy is a physical condition that occurs when there is a sudden, brief change in how the brain works. When brain cells are not working properly, a person's consciousness, movement, or actions may be altered for a short time. These physical changes are called epileptic seizures. Epilepsy is therefore sometimes called a seizure disorder. Epilepsy affects people in all nations and of all races.

Some people can experience a seizure and not have epilepsy. For example, many young children have convulsions from fevers. These febrile convulsions are one type of seizure. Other types of seizures not classified as epilepsy include those caused by an imbalance of body fluids or chemicals or by alcohol or drug withdrawal. A single seizure does not mean that the person has epilepsy.

◆ Incidence ◆

About two million Americans have epilepsy; of the 125,000 new cases that develop each year, up to 50% are in children and adolescents.

◆ Characteristics ◆

Although the symptoms listed below are not necessarily indicators of epilepsy, it is wise to consult a doctor if you or a member of your family experiences one or more of them:

- "Blackouts" or periods of confused memory;
- Episodes of staring or unexplained periods of unresponsiveness;
- Involuntary movement of arms and legs;
- "Fainting spells" with incontinence or followed by excessive fatigue; or
- Odd sounds, distorted perceptions, episodic feelings of fear that cannot be explained.

Seizures can be generalized, meaning that all brain cells are involved. One type of generalized seizure consists of a convulsion with a complete loss of consciousness. Another type looks like a brief period of fixed staring.

Seizures are partial when those brain cells not working properly are limited to one part of the brain. Such partial seizures may cause periods of "automatic behavior" and altered consciousness. This is typified by purposeful-looking behavior, such as buttoning or unbuttoning a shirt. Such behavior, however, is unconscious, may be repetitive, and is usually not recalled.

◆ Educational Implications ◆

Students with epilepsy or seizure disorders are eligible for special education and related services under the Individuals with Disabilities Education Act (IDEA), formerly the Education of the Handicapped Act (Public Law 94-142). Epilepsy is classified as "other health impaired" and an Individualized Education Program (IEP) would be developed to specify appropriate services. Some students may have additional conditions such as learning disabilities along with the seizure disorders.

Seizures may interfere with the child's ability to learn. If the student has the type of seizure characterized by a brief period of fixed staring, he or she may be missing parts of what the teacher is saying. It is important that the teacher observe and document these episodes and report them promptly to parents and to school nurses.

Depending on the type of seizure or how often they occur, some children may need additional assistance to help them keep up with classmates. Assistance can include adaptations in classroom instruction, first aid instruction on seizure management to the student's teachers, and counseling, all of which should be written in the IEP.

EPILEPSY

It is important that the teachers and school staff informed about the child's condition, possible effects of medication, and what to do in case a seizure occurs at school. Most parents find that a friendly conversation with the teacher(s) at the beginning of the school year is the best way to handle the situation. Even if a child has seizures that are largely controlled by medication, it is still best to notify the school staff about the condition.

School personnel and the family should work together to monitor the effectiveness of medication as well as any side effects. If a child's physical or intellectual skills seem to change, it is important to tell the doctor. There may also be associated hearing or perception problems caused by the brain changes. Written observations of both the family and school staff will be helpful in discussions with the child's doctor.

Children and youth with epilepsy must also deal with the psychological and social aspects of the condition. These include public misperceptions and fear of seizures, uncertain occurrence, loss of self control during the seizure episode, and compliance with medications. To help children feel more confident about themselves and accept their epilepsy, the school can assist by providing epilepsy education programs for staff and students, including information on seizure recognition and first aid.

Students can benefit the most when both the family and school are working together. There are many materials available for families and teachers so that they can understand how to work most effectively as a team.

◆ Resources ◆

Ellis, G.J., & Trusz-Parks, S. (1993). *Epilepsy: Parent and family networks resource manual*. Landover, MD: Epilepsy Foundation of America. [Telephone: (301) 577-0100.]

Epilepsy Foundation of America. (1992). *Brothers and sisters: A guide for families of children with epilepsy*. Landover, MD: Author. [Telephone: (301) 577-0100.]

Epilepsy Foundation of America. (1993). *Issues and answers: A guide for parents of children with seizures, ages six to twelve*. Landover, MD: Author. [Telephone: (301) 577-0100.]

Freeman, J.M., Vining, E., E. Pillas, D.J. (1993). *Seizures and epilepsy in childhood: A guide for parents* (rev. ed.). Baltimore, MD: Johns Hopkins University Press. [Telephone: 1-800-537-5487.]

Karp, N., & Ellis, G.J. (Eds.). (1992). *Time out for families: Epilepsy and respite care*. Landover, MD: Epilepsy Foundation of America. [Telephone: (301) 577-0100.]

Kobrin, E.R. (1991). *Issues and answers: A guide for parents of teens and young adults with epilepsy*. Landover, MD: Epilepsy Foundation of America. [Telephone: (301) 577-0100.]

◆ Organisations ◆

Epilepsy Foundation-National Office
4351 Garden City Drive, Suite 406
Landover, MD 20785
(301) 459-3700; (800) 332-1000 (Toll Free)
(301) 577-0100, for Publications
E-Mail: postmaster@efa.org
URL: <http://www.efa.org>

National Institute of Neurological Disorders and Stroke (NINDS)
National Institutes of Health
Building 31, Room 8A06
9000 Rockville Pike
Bethesda, MD 20892-2540
(301) 496-5751; (800) 352-9424
E-Mail: nindswebmaster@nih.gov
URL: <http://www.ninds.nih.gov/>

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Epilepsy Fact or Fiction

Write T for True or F for False on the line in front of each statement.

- _____ 1. One person out of every 50 has epilepsy.
- _____ 2. The first thing to do when a person has a seizure is to call an ambulance.
- _____ 3. Epilepsy is contagious (can be passed from one person to another).
- _____ 4. When someone is having a seizure, it is necessary to force something between the teeth to prevent swallowing the tongue.
- _____ 5. Epilepsy is nearly always inherited.
- _____ 6. Epilepsy becomes worse with age.
- _____ 7. Many states had laws forbidding people with epilepsy to marry.
- _____ 8. People with epilepsy are not allowed to go into military service.
- _____ 9. The EFA (Epilepsy Foundation of America) helps in vocational counseling, research for epileptics, and general public information.
- ✓ _____ 10. Epilepsy is the most common of neurological disorders.
- _____ 11. Most people with epilepsy have grand mal (violent seizures).
- _____ 12. Epilepsy is a disorder affecting the nerve cells of the brain.
- _____ 13. There is no treatment for epilepsy.
- _____ 14. Epilepsy is a social problem because of misunderstanding. Many times people with epilepsy find themselves the target of discrimination.
- _____ 15. Fifty percent of people with epilepsy can control their seizures.
- _____ 16. In some cases, a tap on the shoulder, a particular melody, bright or flashing lights, or television can cause a seizure.
- _____ 17. Sometimes people with epilepsy receive a warning that a seizure is coming on.
- _____ 18. Epilepsy can be disfiguring and painful.
- _____ 19. People with epilepsy, have few seizures if they lead active, productive lives.
- ✓ _____ 20. There is no cure for epilepsy.

Answers

Epilepsy Fact or Fiction

1. False (1%)
2. False
3. False
4. False
5. False (sometimes every other generation)
6. False (some kids grow out of it)
7. True
8. True
9. True
10. True
11. False
12. True
13. False
14. True
15. True
16. True
17. True
18. True
19. False
20. True

Epilepsy Quiz

1. c
2. b,c,d
3. a,c
4. a
5. a,b,c,d
6. a
7. a
8. none
9. a
10. none



TEST YOUR SEIZURE SENSE



Check your knowledge about epilepsy by taking the following test: (Answers are found on the back)

1. A seizure is excessive electrical activity in the brain. True False
2. If someone has a seizure, they have epilepsy. True False
3. Through various tests, doctors can always determine why an individual has epilepsy. True False
4. The percent of the population which has epilepsy is:
a. 1-2% b. 5-6% c. 10-12% d. 18-20%
5. If an individual has epilepsy, they always have seizures during which they fall down, their body stiffens and shakes. True False
6. During a generalized tonic-clonic seizure (grand mal), a bystander should:
a. cushion the person's head
b. loosen tight neckwear
c. turn the person on his side
d. avoid putting anything in the person's mouth
e. a, b, and c
f. all of the above
7. Which of the following statements about epilepsy are false:
a. Epilepsy is contagious.
b. Epilepsy is a form of mental retardation or mental illness.
c. If someone has epilepsy, you can tell just by looking at them.
d. During a seizure, a person can swallow their tongue.
e. a, b, and c
f. all of the above
8. If a person reaches age 8 without developing epilepsy, they won't develop it during their lifetime. True False
9. If a person is taking antiepileptic medications as prescribed, they will not have any more seizures. True False

Match the type of seizure to the behavior associated with it:

10. Absence a. Purposeless behavior such as wringing hands, smacking lips, chewing, picking at clothing.
11. Complex Partial b. Person collapses, body becomes rigid and jerks.
12. Tonic-Clonic c. Staring blankly for a few seconds.

Answers

1. True. What the person does during a seizure is determined by the location in the brain in which the seizure occurs.
2. False. An individual may have a seizure due to drug or alcohol withdrawal, diabetes, with a high fever or due to other factors. Epilepsy is the tendency to have recurrent seizures. Some people refer to epilepsy as a "seizure disorder".
3. False. While the cause of epilepsy can sometimes be traced to a head injury, stroke, brain tumor, infection or disease, the cause is unknown in over 50% of the cases of epilepsy.
4. a. 1-2%. Approximately 2 million people in the United States have epilepsy. That's about 50,000 right here in Maryland!
5. False. The generalized tonic-clonic seizure (formerly called grand mal) is one of over 20 different types of seizures!
6. f. All the listed steps should be taken.
7. f. All the statements listed are myths associated with epilepsy.
8. False. Epilepsy can occur at any age, any time. It's as likely to begin in the sixties, seventies, and eighties as it is during the first ten years of life.
9. False. About 50% of individuals with epilepsy are seizure-free with their medications; many others will still experience a few seizures with medication, while a few will have little to no control of their seizures despite the medication.
10. c. Formerly called "petit mal" seizure.
11. a. Formerly called "psychomotor" seizure.
12. b. Formerly called "grand mal" seizure.

The Epilepsy Foundation of the Chesapeake Region (EFCR), is a statewide, private, non-profit organization that provides programs and services for individuals with epilepsy and other disabilities, their families and the general community. EFCR is an affiliate of the Epilepsy Foundation of America.

For more information about epilepsy or EFCR's programs and services, contact the Epilepsy Foundation of the Chesapeake Region at 410-828-7700 or 800-492-2523. Our main office is located at 300 East Joppa Road, Suite 1103, Towson, MD 21286. We have additional offices throughout the State, as well as in Washington D.C. and Northern Virginia.

Bibliography

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RESOURCE ORGANIZATIONS

State/National Resource Organizations

Epilepsy Foundation of the
Chesapeake Region
Hampton Plaza
300 East Joppa Road, Suite 1103
Towson, MD. 21286-3018
410-828-7700

AIDS Hotline (National and
Statewide Hotline)
1-800-638-6252

American Diabetes Association
Frederick County Chapter
407 Central Avenue
Reisterstown, MD 21136
1-800-232-3662

LUPUS Foundation
1-800-424-8567

American Epilepsy Society
638 Prospect Ave.
Hartford, CT 06105-4298

Multiple Sclerosis 24 Hour
Information Line
1-800-344-4867

Amyotrophic Lateral Sclerosis
1-800-782-4747

Tourette Syndrome Association
1-800-237-0717

Epilepsy Foundation of America
4351 Garden City Drive
Landover, MD. 20785-2267
1-800-332-1000

Asthma and Allergy Foundation of
America
1-800-727-8462

Cystic Fibrosis Foundation
1-800-344-4823

Local Organizations

Epilepsy Foundation of the Chesapeake Region
Hampton Plaza
300 East Joppa Road, Suite 1103
Towson, MD. 21286-3018
410-828-7700